

# MCH

# Installation steps

June 2021

WEATHER CLIMATE WATER  
TEMPS CLIMAT EAU



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World Meteorological Organization  
Organisation météorologique mondiale

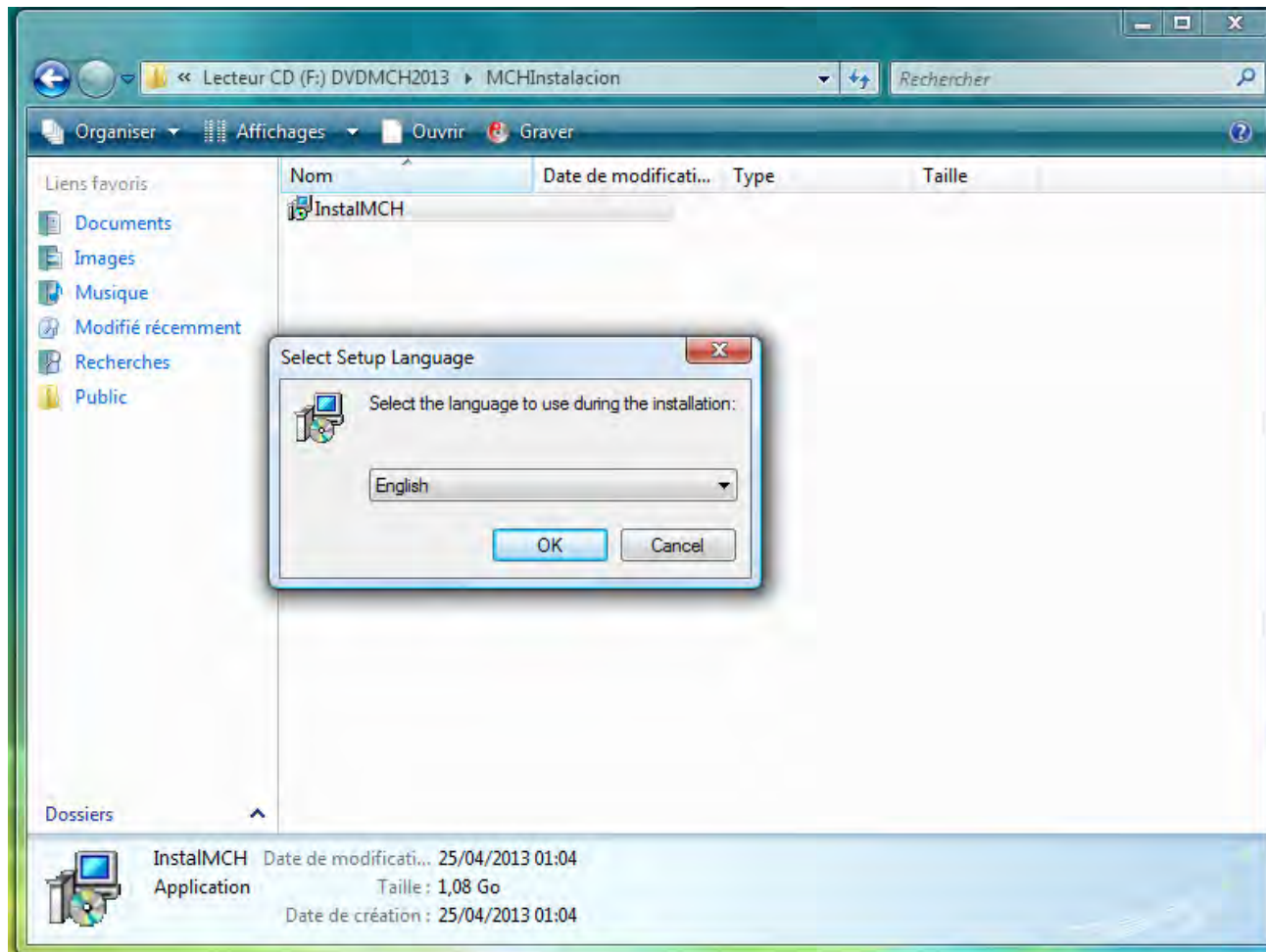
(Updated 17.06.2021)

# Configuration of the computers & Installation environment

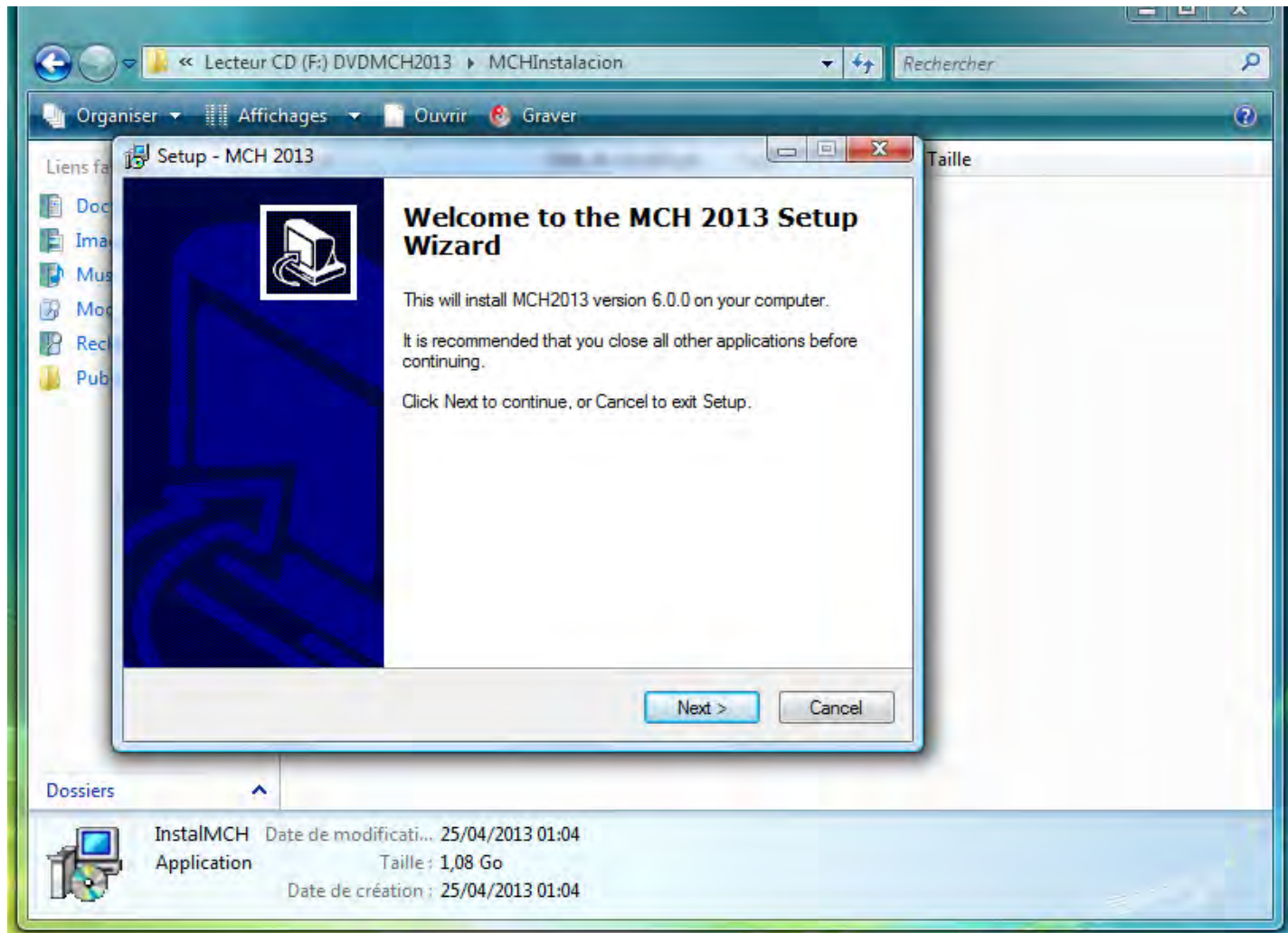
- Login with full administrator rights
- Check if your computer has a 32 or 64-bit processor
- Create shortcuts to ODBC, services and control panel
- Set regional settings, decimals should be defined with dots (.)
- Turn Wi-Fi off or disconnect the computer from internet
- Turn Antivirus off
- Disable Firewall

# Installation of MCH

- Open MCHInstalacion → InstalMCH.exe

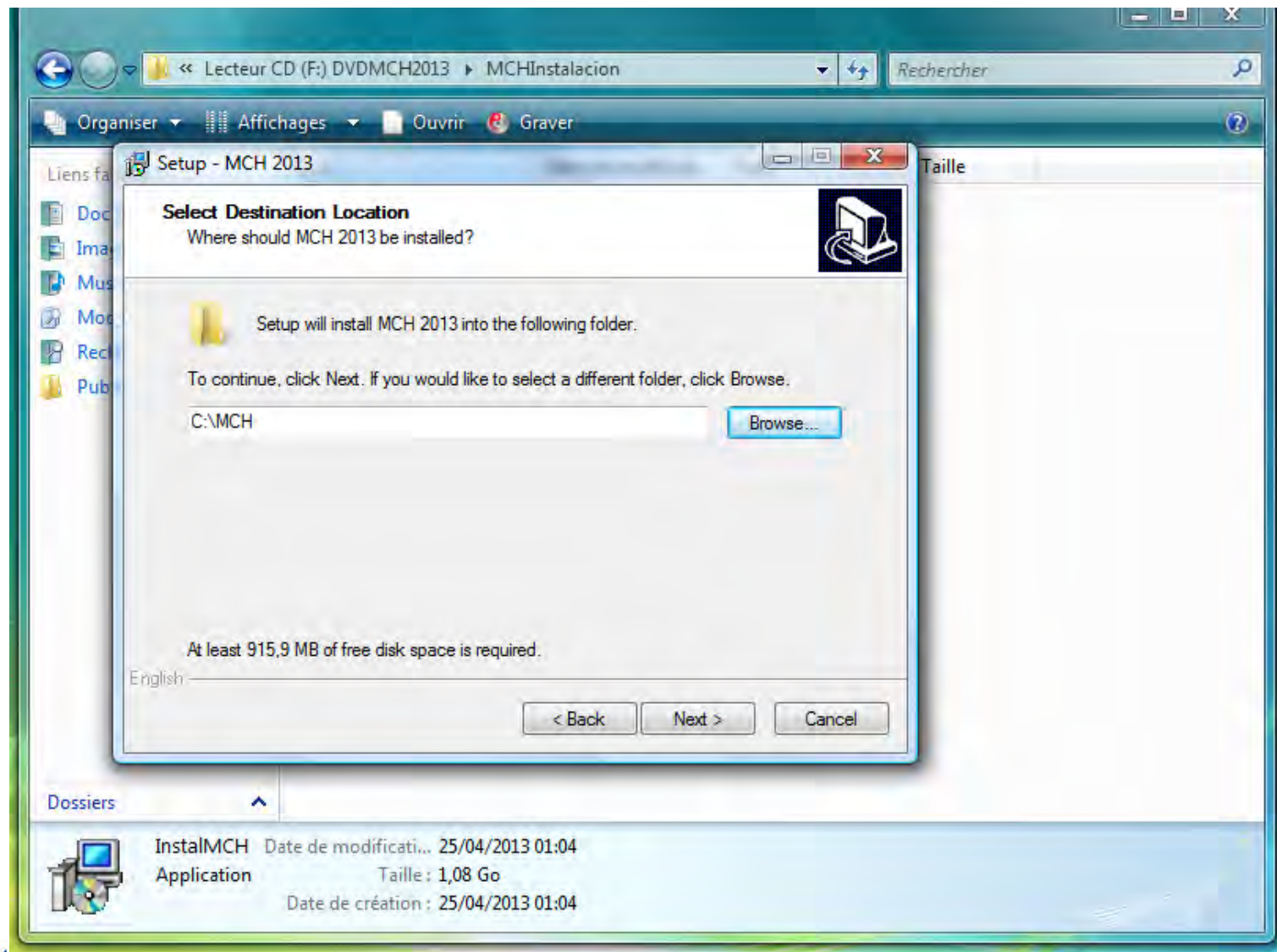


# Installation of MCH

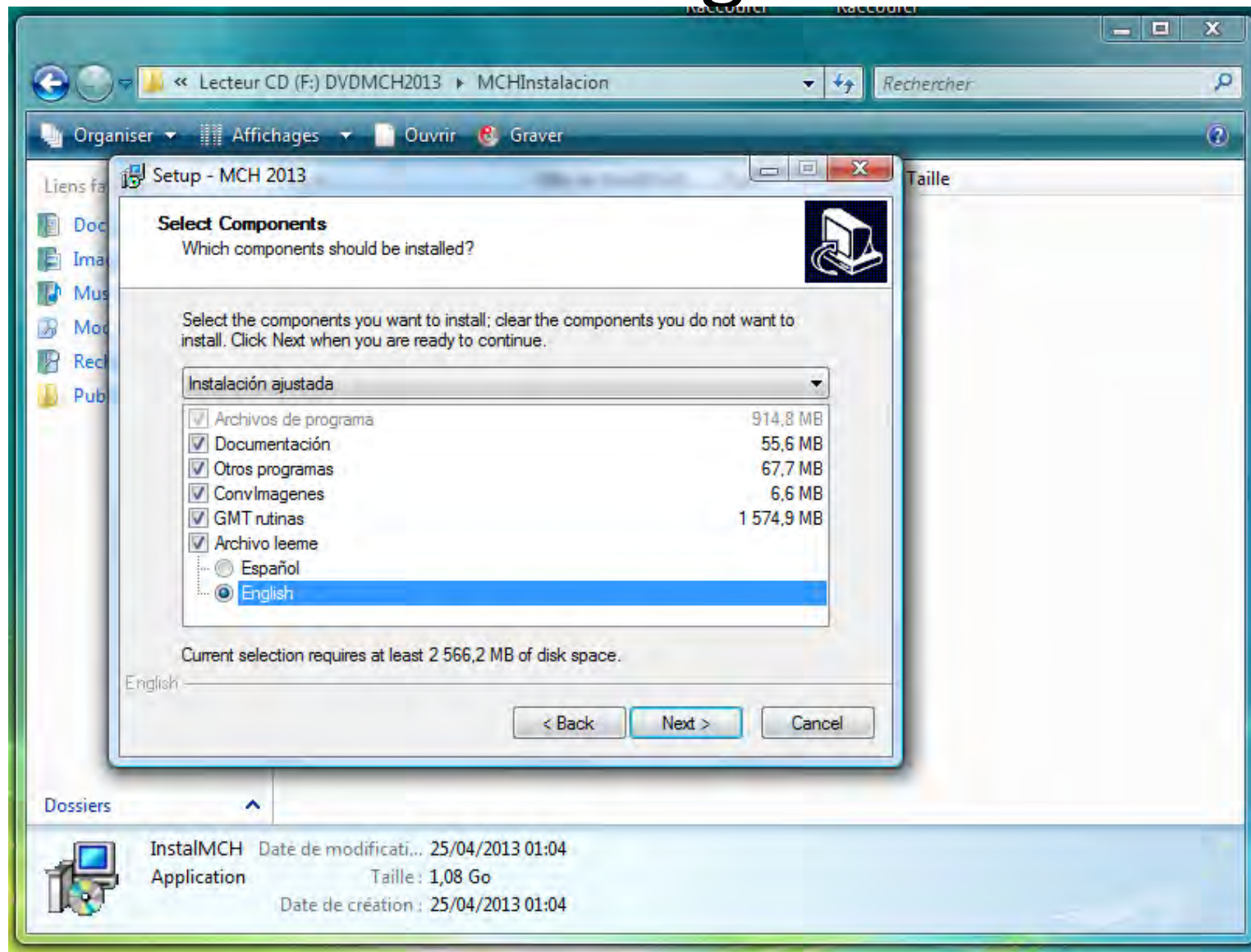




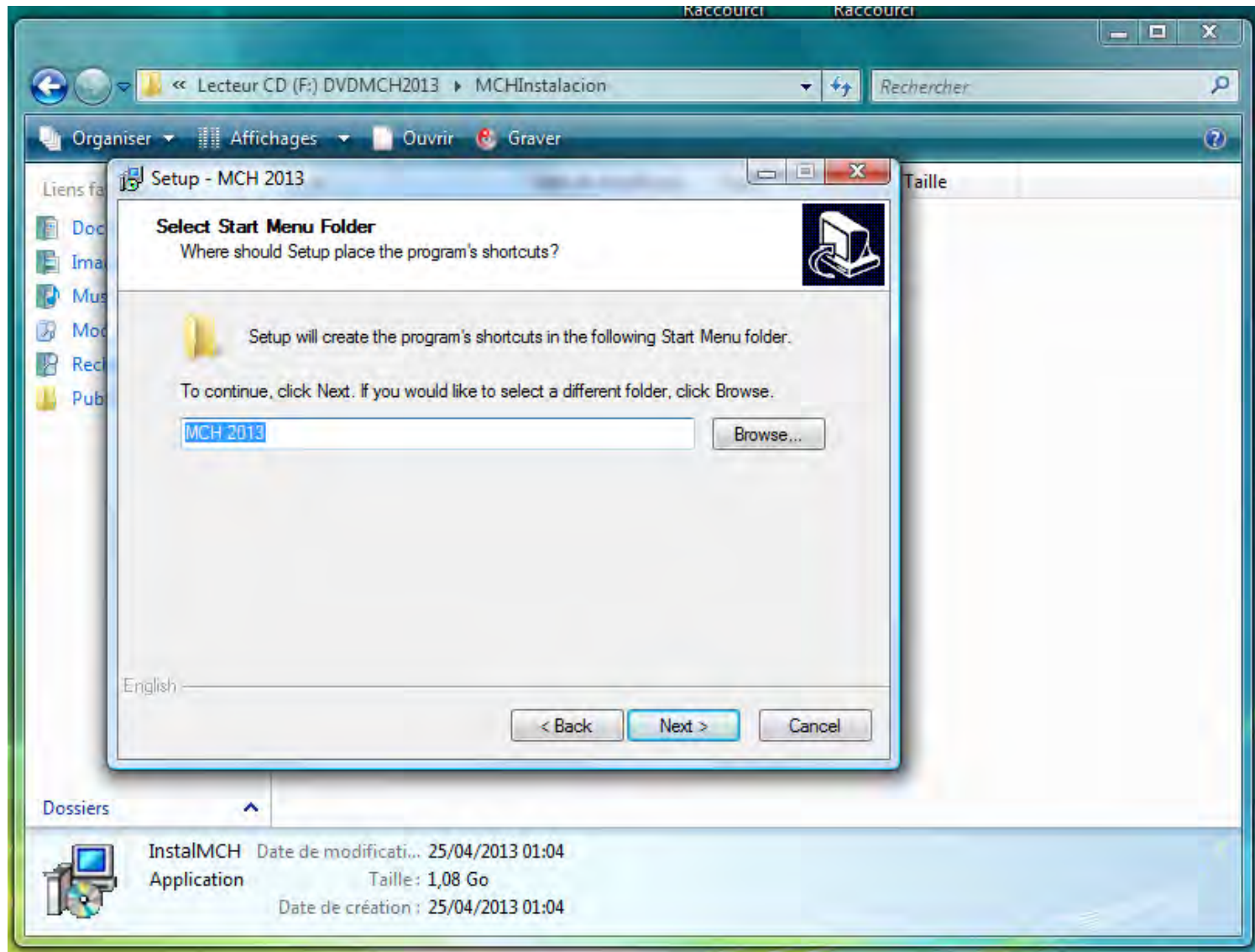
- Save in the root, to avoid long path
- No space in the name of the folder



# Select English

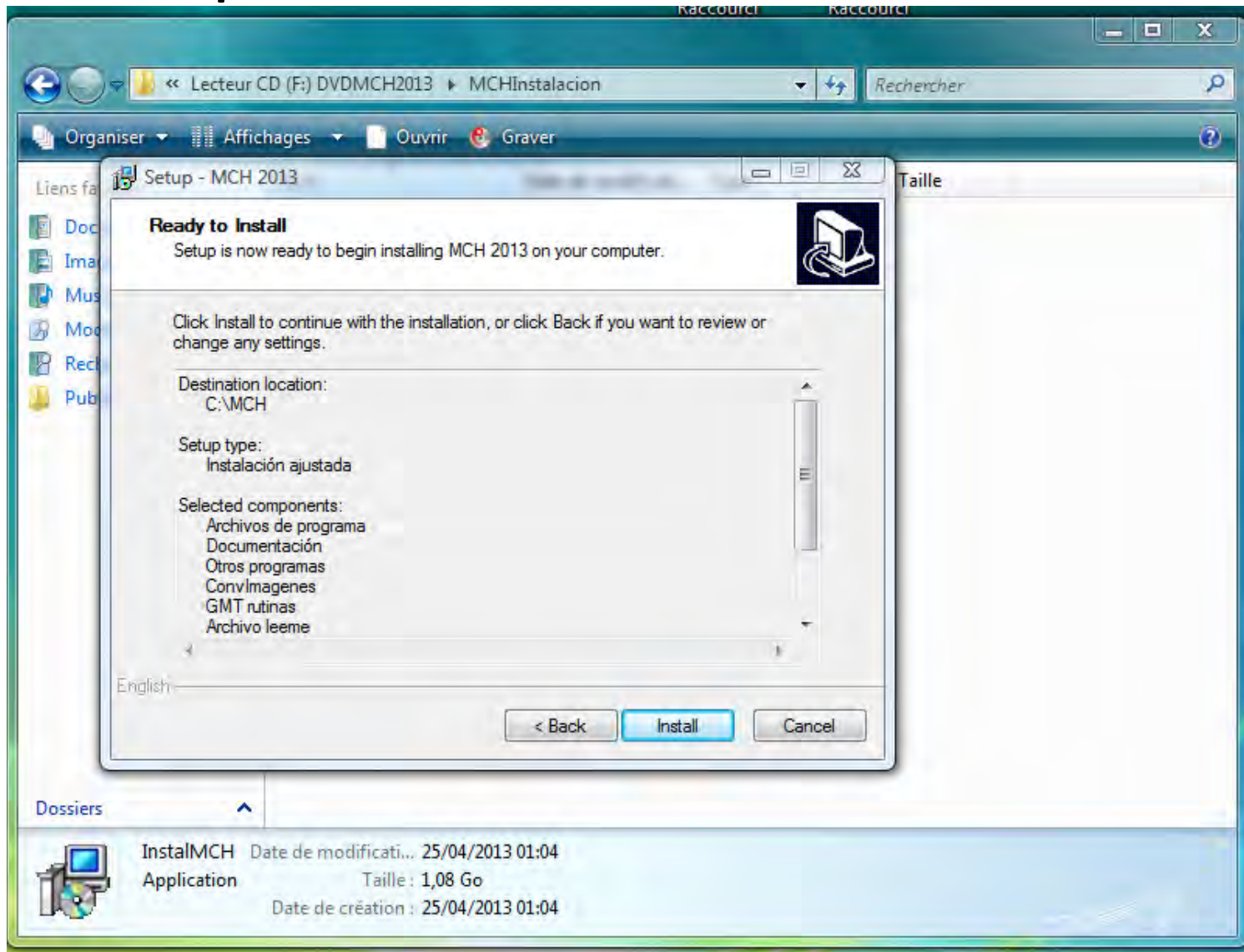


# Rename the shortcut if needed



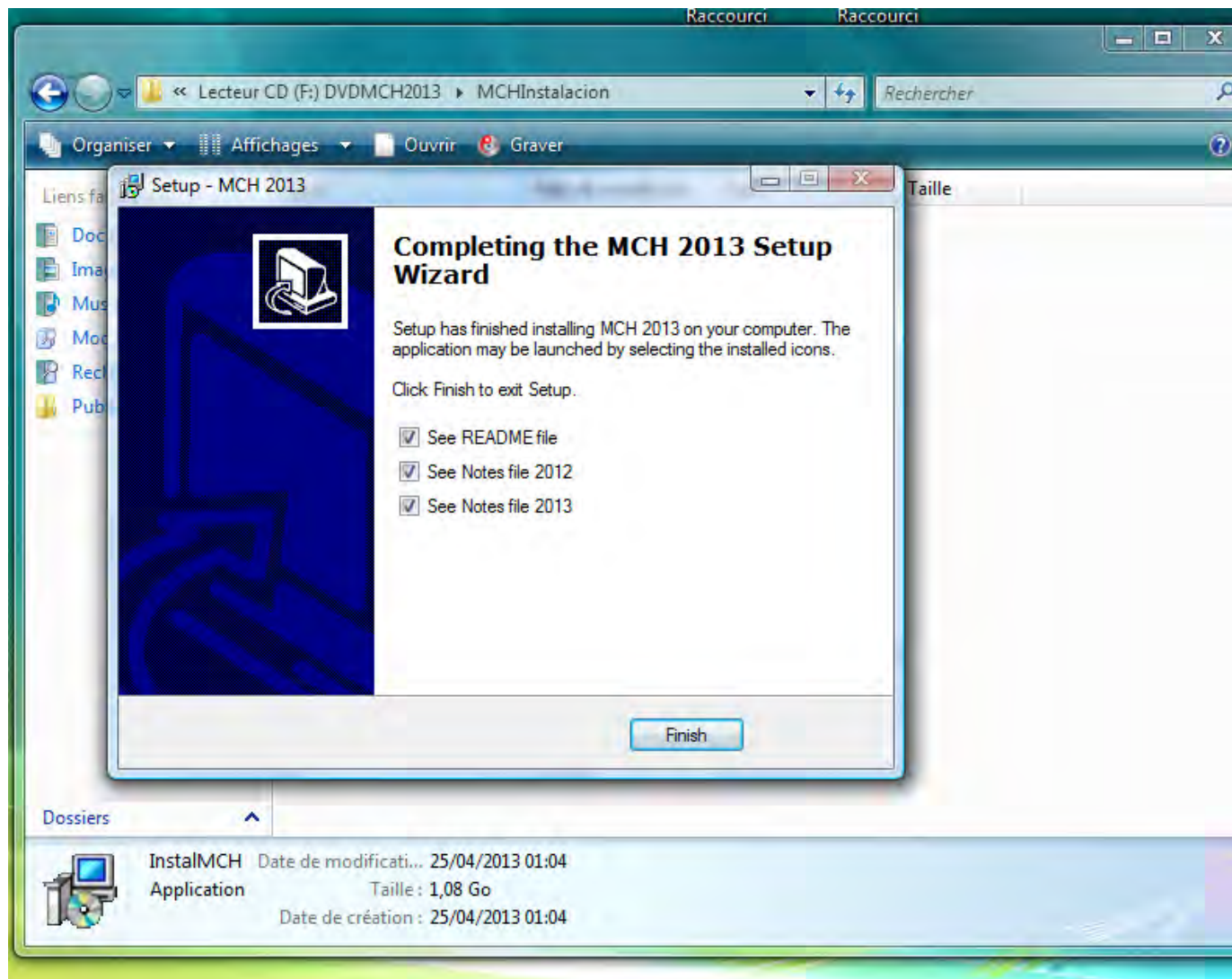


# Check if all parameters are OK and click install





# Finish installation



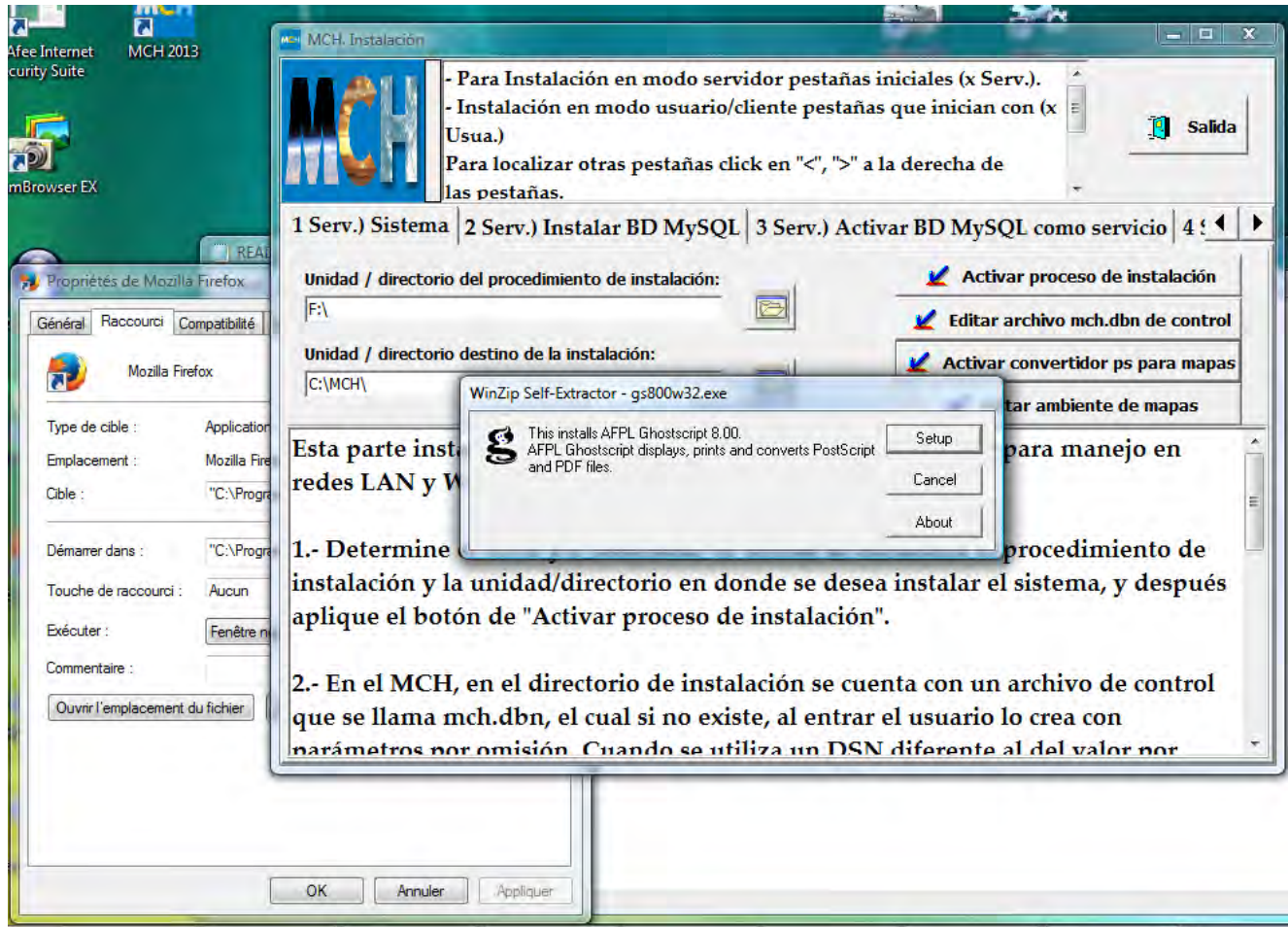
# Installation of additional software



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# Install gostscript.ps – 32 or 64 bits

## Leave default settings (install fonts ticked)

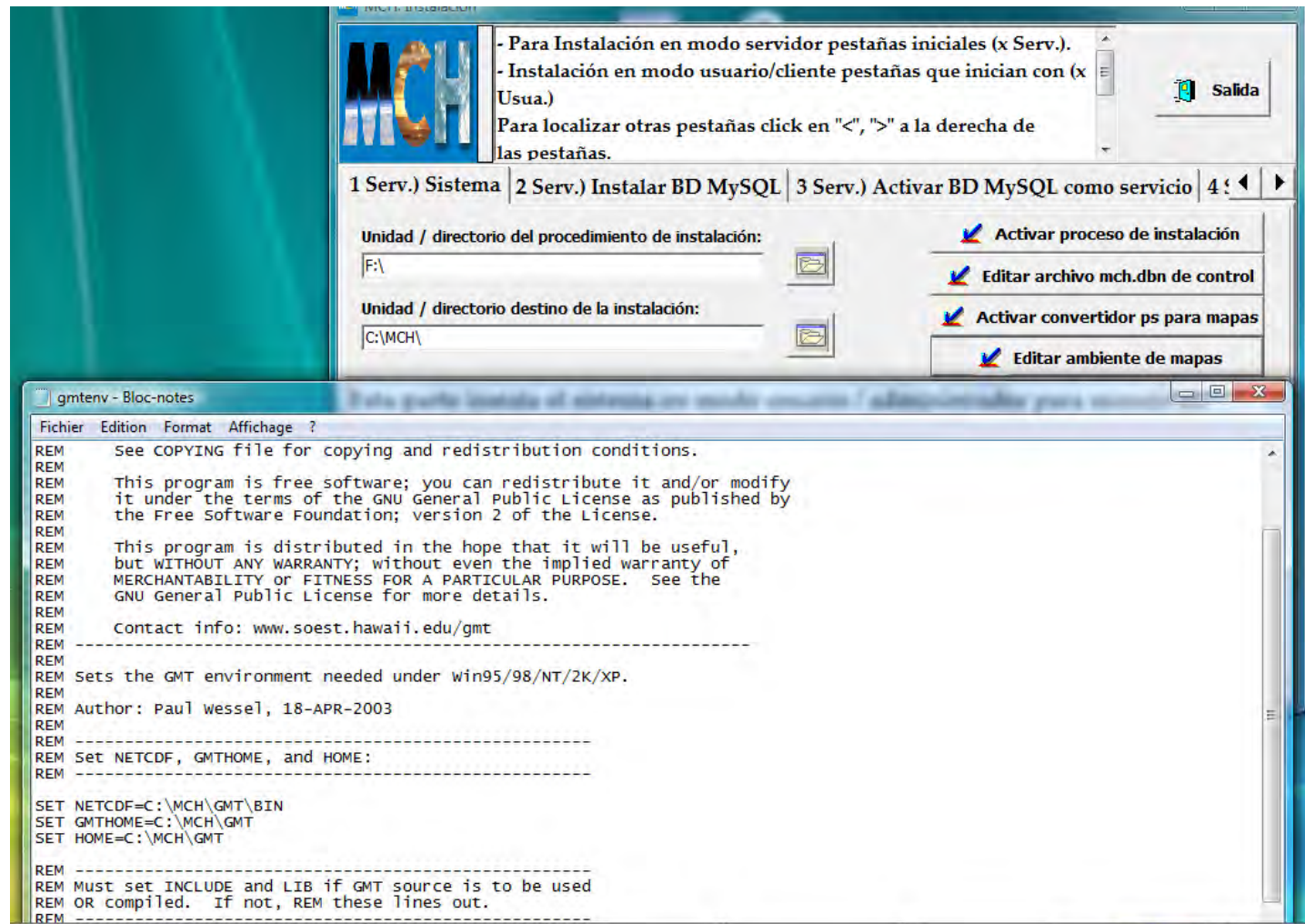


# Install RunTimePlus (RunTimePlus /dBasePlusRuntimeEngine1703\_EN.exe)





# If needed edit gmtenv.bat (C:/MCH/gmtenv.bat), needed for the map environment

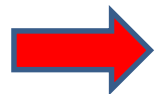


# Installation of MySQL Server 5



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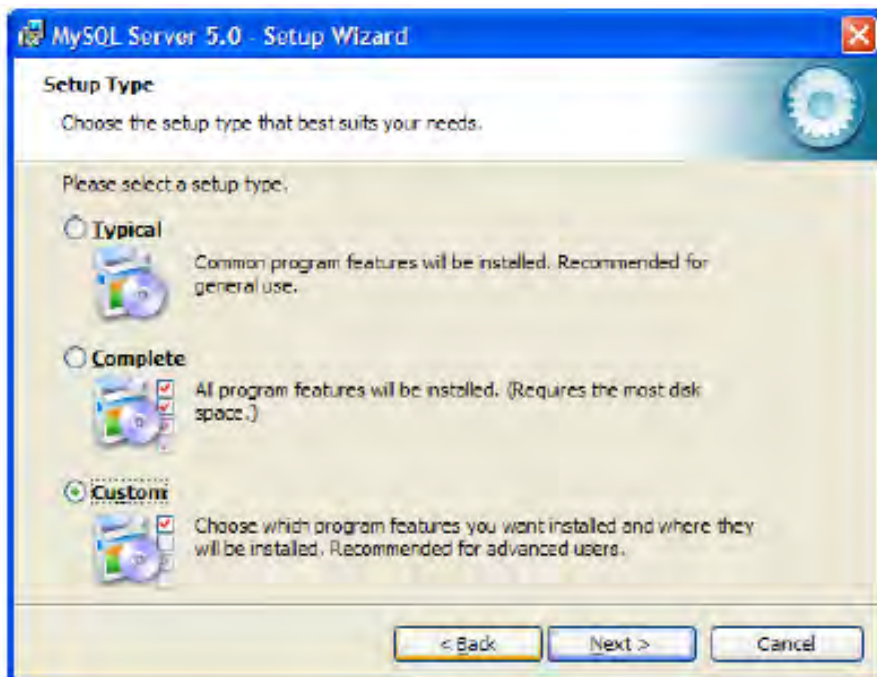
# Execute: SetupMySQL5\_0\_51.exe



Click Next

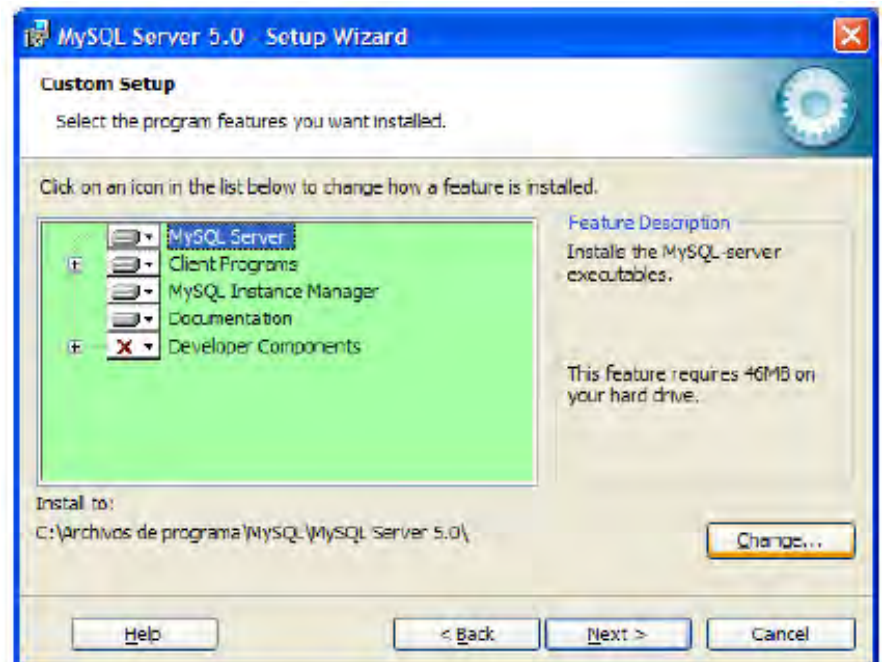


WMO OMM



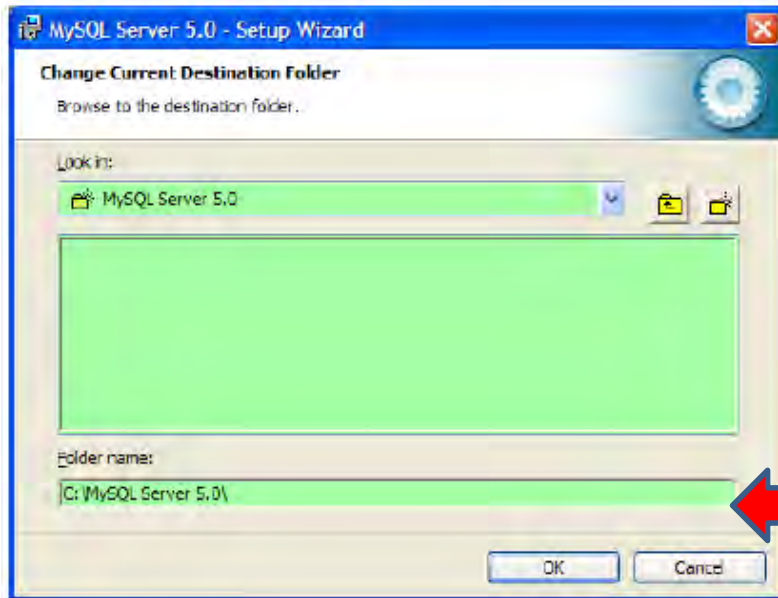
- Select Custom
- Next

- Select Change...



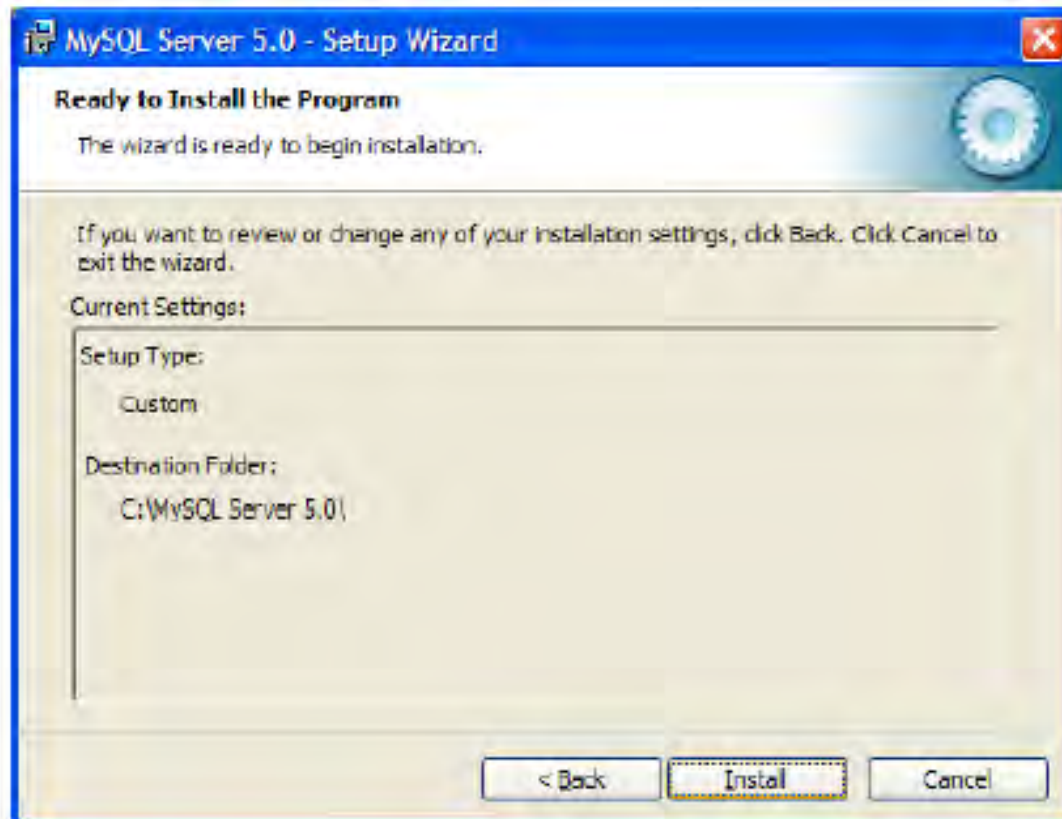


- Change the path to: **C:\MySQL5\**



- Click Next

# Click Install



# MySQL Server

- Tick Configure MySQL Server now
- Click Finish





- Click Next

- Click Next





- Select Detailed Configuration



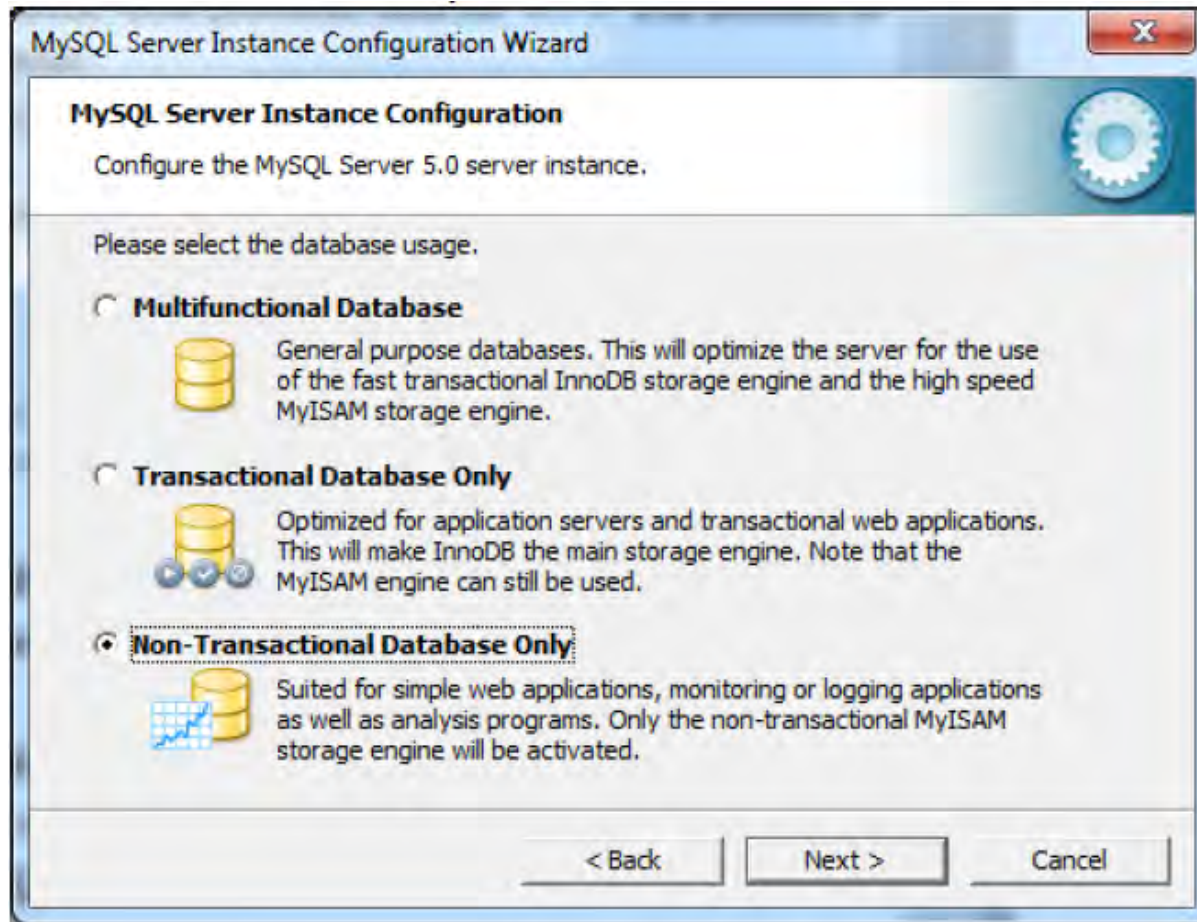
- Click Next

## ■ Select Server Machine



■ Click Next

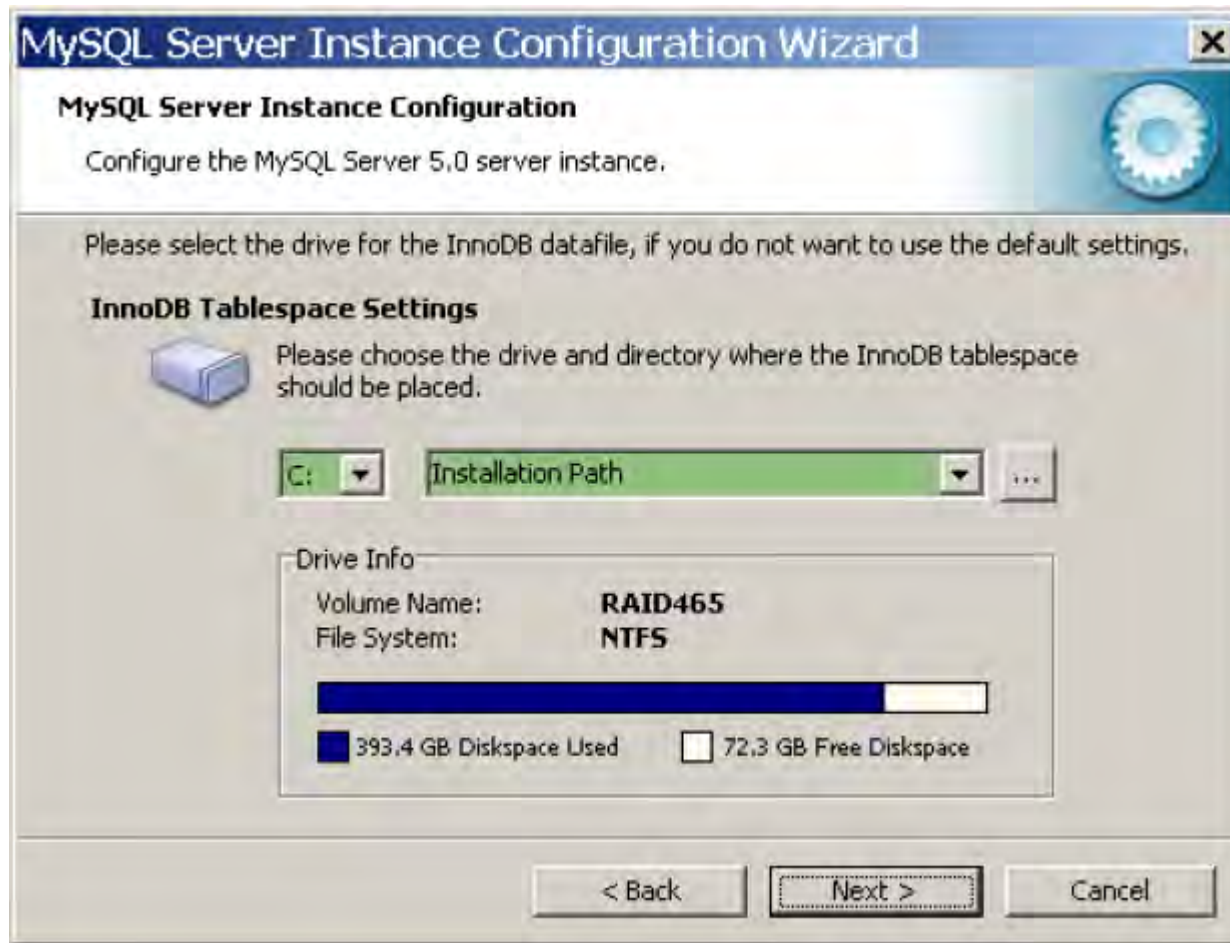
## ■ Select Non-Transactional Database



■ Click Next

**Note:** You can also select Multifunctional Database if you are already using a Transactional Database on your computer

# Check installation path



■ Click Next



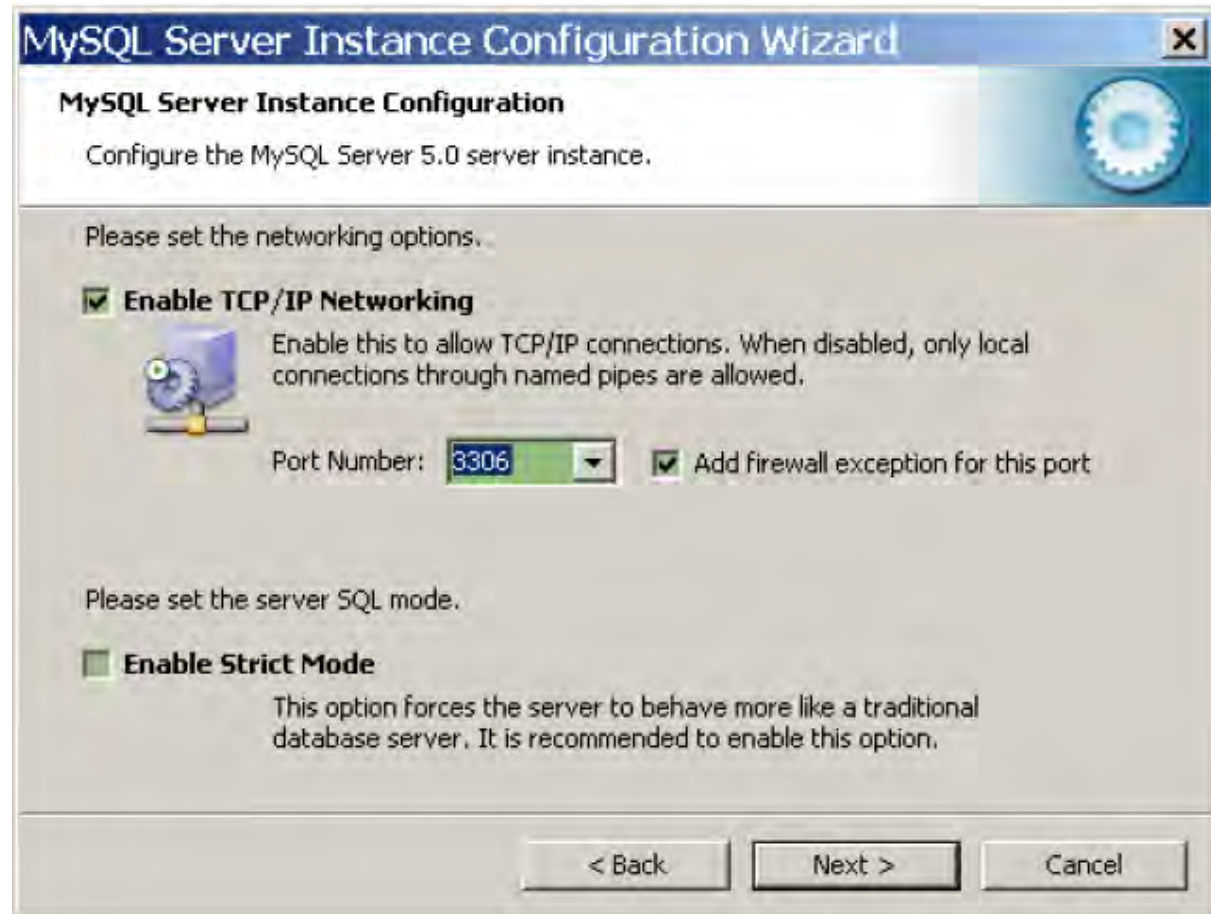
# Select number of users



- Click Next

# Networking options

- Tick Enable TCP/IP Networking
- Select port 3306
- Tick Add firewall exception
- Untick Enable Strict Mode
- Click Next



- Select Standard Character Set



- Click Next

- Tick Install as Windows Service
- Select MySQL5
- Tick Launch the MySQL server automatically
- Tick include Bin
- Click Next





# MySQL Admin password

- Tick Modify Security Settings

- Create a password

- **Write it down !!!**

- Tick Enable root access from remote machines

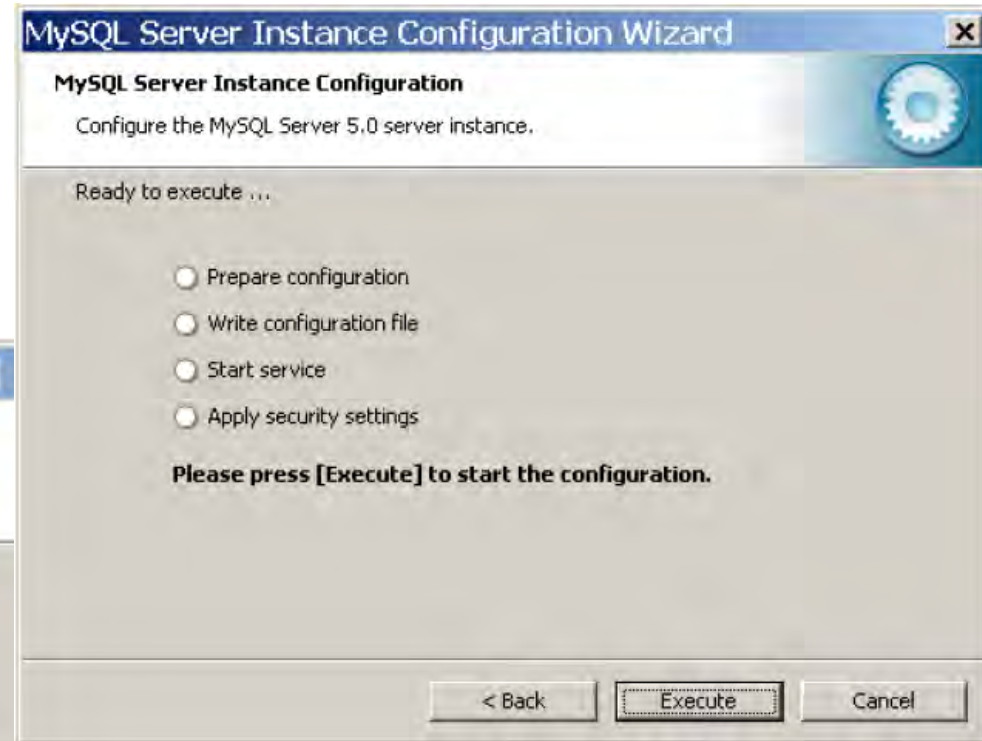
- Click Next



The image shows the 'MySQL Server Instance Configuration Wizard' window. The title bar reads 'MySQL Server Instance Configuration Wizard'. Below the title bar, the main heading is 'MySQL Server Instance Configuration' with the subtitle 'Configure the MySQL Server 5.0 server instance.' The window contains a section titled 'Please set the security options.' with two main options: 'Modify Security Settings' (checked) and 'Create An Anonymous Account' (unchecked). Under 'Modify Security Settings', there is a 'New root password:' field with a password icon, a 'Confirm:' field with a password icon, and a checkbox for 'Enable root access from remote machines' (checked). A warning icon is present next to the 'Create An Anonymous Account' option, with a note: 'This option will create an anonymous account on this server. Please note that this can lead to an insecure system.' At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.



- Click Execute



- Click Finish

- Check that the service is properly running
- If not check firewall exceptions
- Check that password is ok: Programmes → MySQL → MySQL Server 5 → MySQL Command Line Client



- Type in your Password → Click Enter
- Type in Exit → Click Enter

# MCH

## MySQL Server 5 Tools



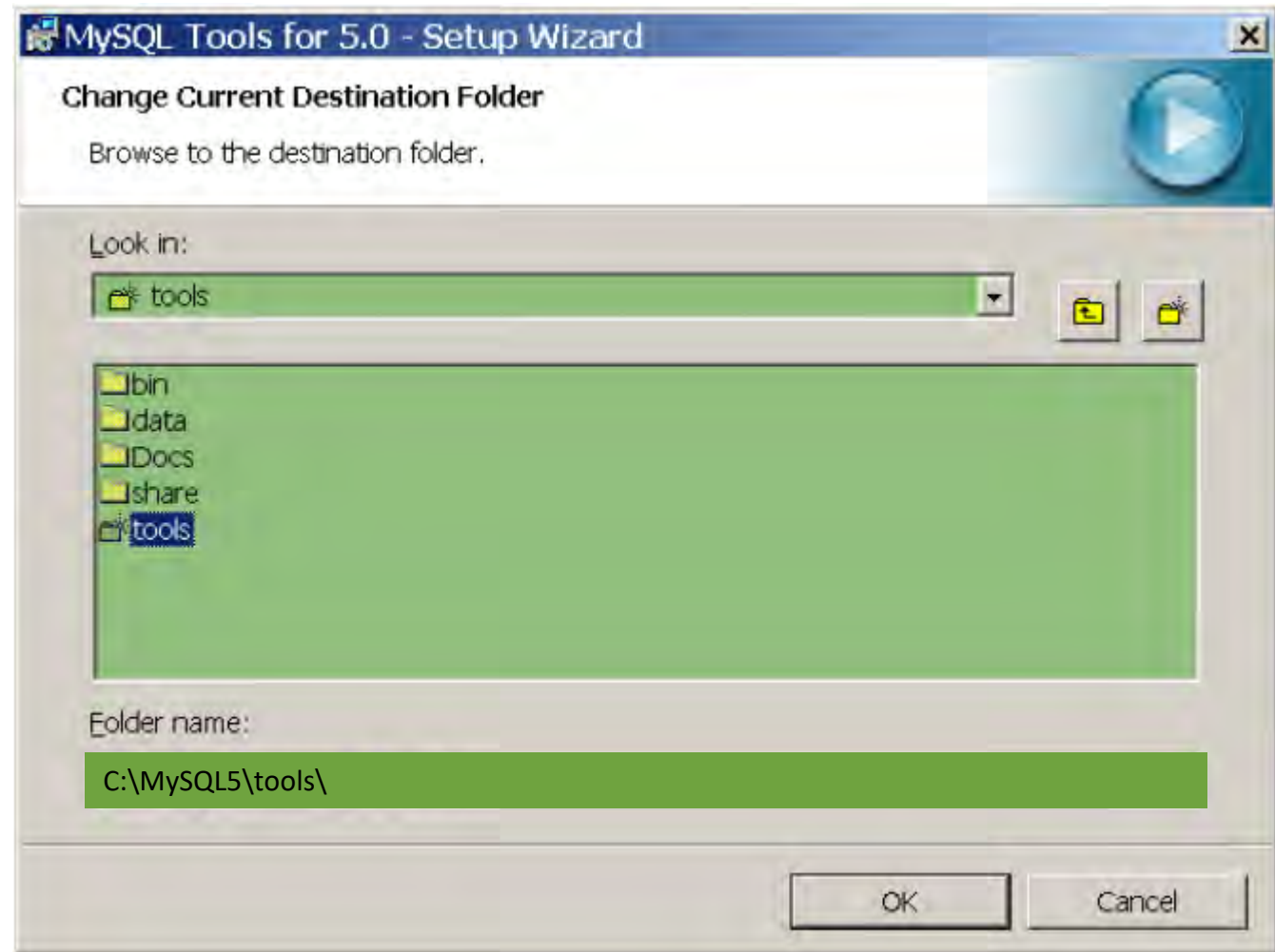
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- Execute: mysql-gui-tools-5.0-r12-win32.msi



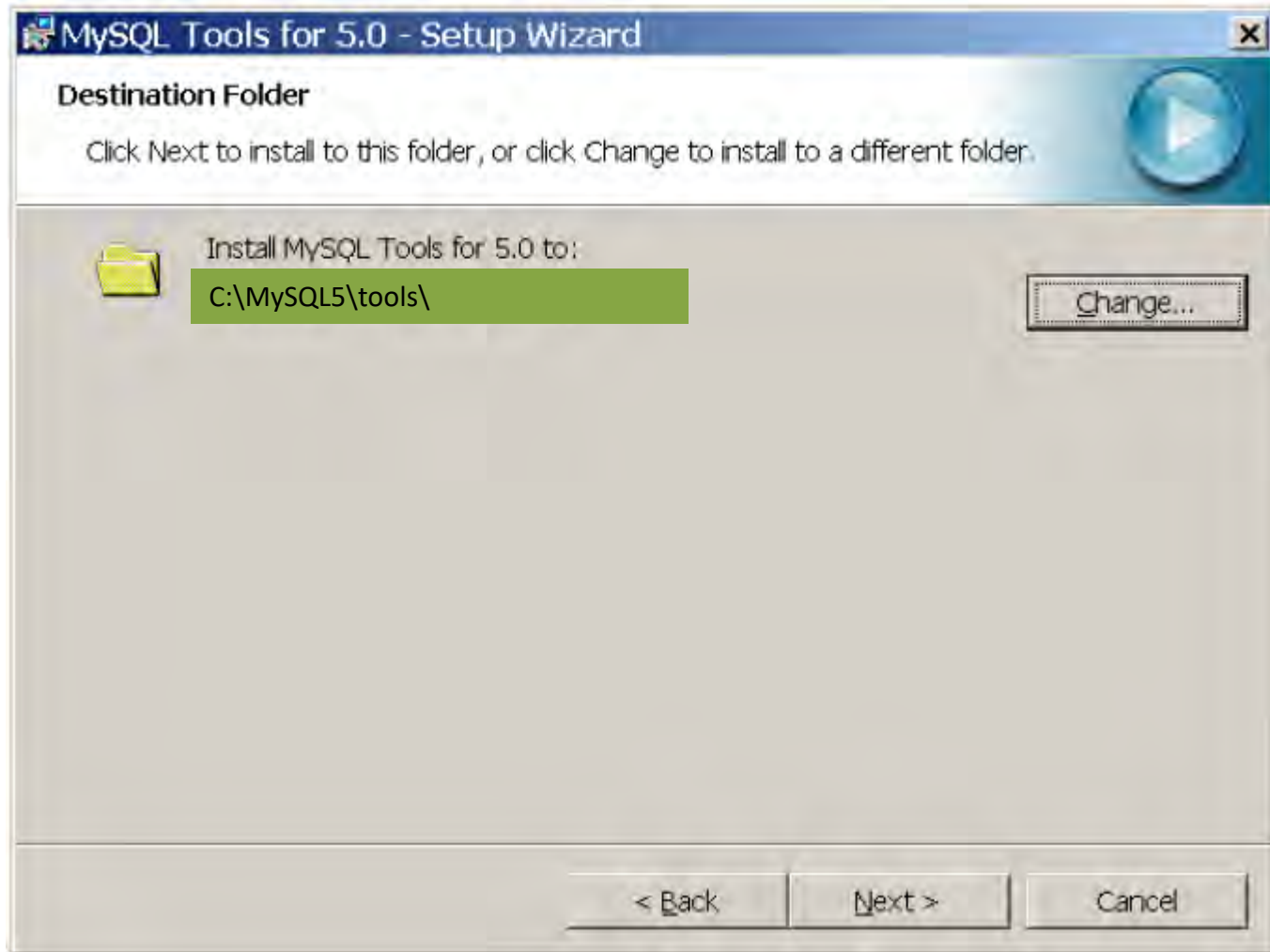
- Click Next

- Select the folder tools within the folder where MySQL Server 5 has been installed
- If it does not exist create a new folder and rename it « tools »
- Click OK

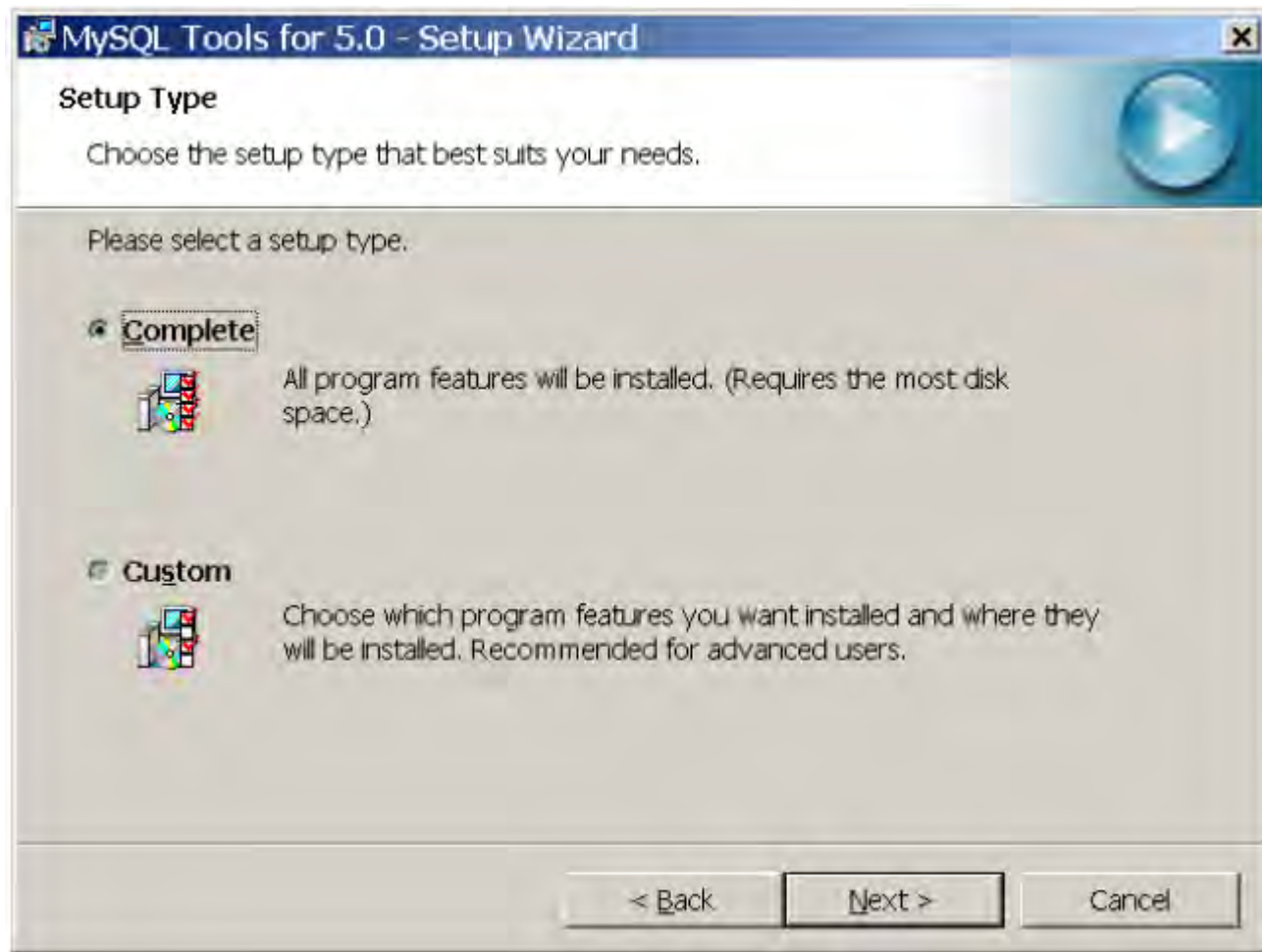




- Click Next

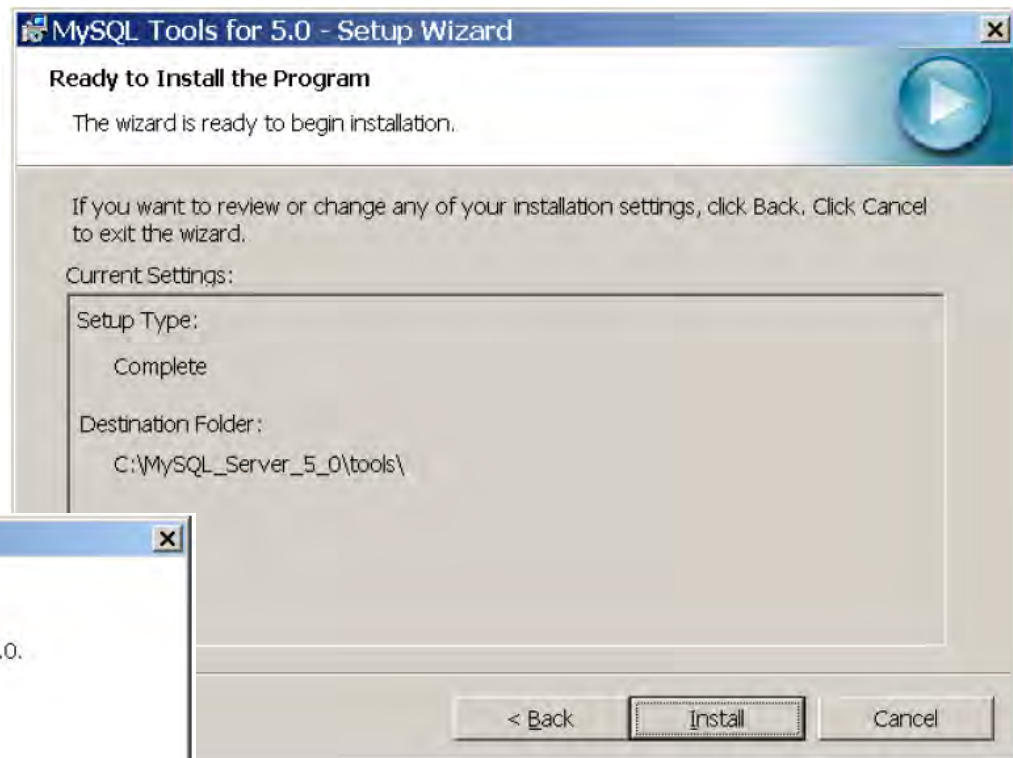


## ■ Select Complete



## ■ Click Next

- Click Install



- Click Finish

# Installation of the ODBC connector



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# Installation of the ODBC connector

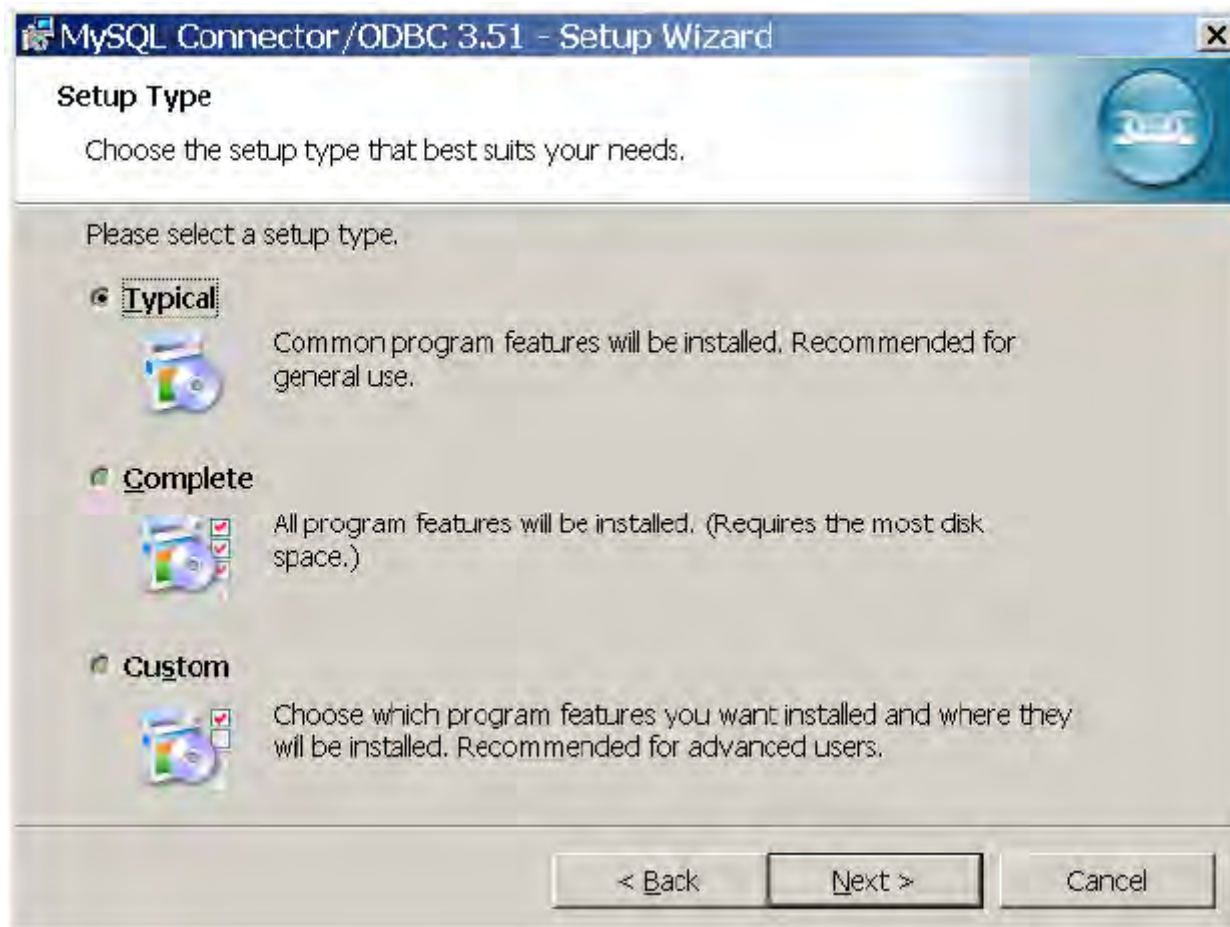
- Select the ODBC driver which is compatible to your system (32 or 64 bits)\*
- Click Next



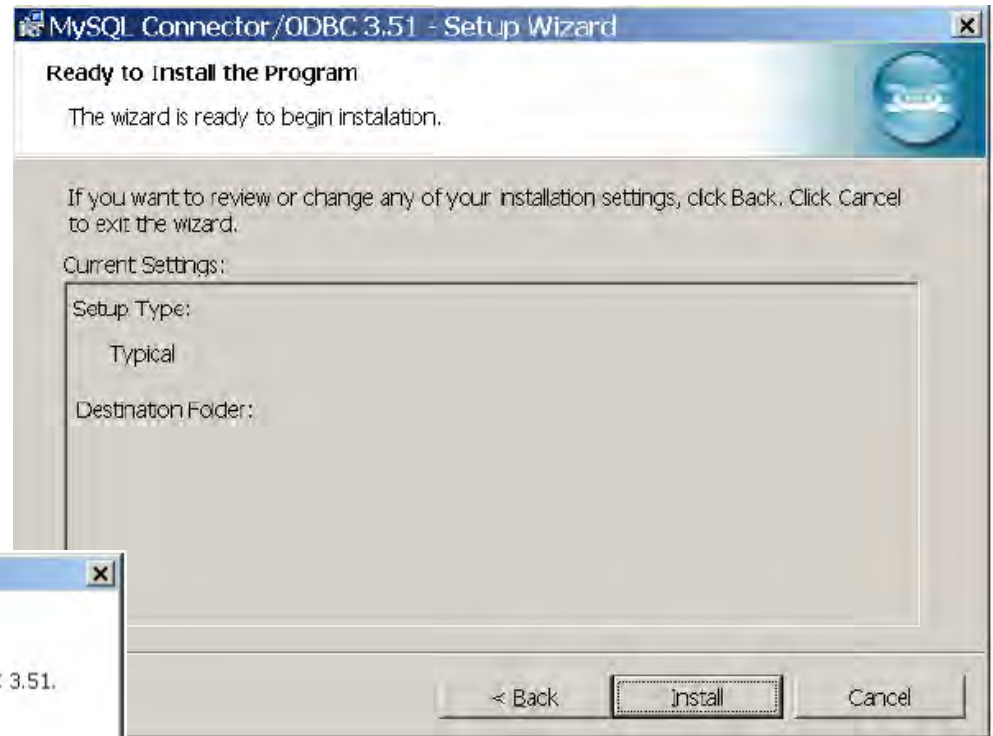
\* Select the latest version in the mysql folder



- Select Typical
- Click Next



- Click Install



- Click Finish

# Connect MCH to MySQL



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# Connect MCH to MySQL

- Upload the databases mcheng and capttemp to C:\MySQL5\data
- Rename mcheng to mch
- Run ODBC Data Source as Administrator (control panel → Administrative Tools → Data Sources (ODBC))

Or directly under:

- For 32 bits: C:\Windows\System32\odbcad32.exe
- For 64 bits: C:\Windows\SysWOW64\odbcad32.exe

- Under **System DSN** click Add...
- Look for MySQL ODBC 3.51 Driver and select it
- Click Finish
- Fill the fields in
- Test the connection
- Click OK
- Repeat this process for all connected databases
- Repeat this process for 32 and 64 bit

Connector/ODBC 3.51.21 - Add Data Source Name

Connector/ODBC

MySQL

Login | Connect Options | Advanced

Data Source Name: HC

Description: DSN para Sistema Hidroclimatología

Server: 192.168.0.30

User: root

Password: \*\*\*\*\*

Database: hc

Test | Diagnostics >> | OK | Cancel | Help

**Server**

The hostname of the MySQL server.

**Optional** Yes (silently uses default)  
**Default** localhost



# Edit mch.dbn file

(in the root folder where MCH has been installed)

Lines to edit:

1. mch
2. mysql5
3. 2
4. 2
5. C:\programme files\Mozilla Firefox\firefox.exe

1. DSN (ODBC connection name)
2. Version of MySQL
3. User interface language: 1= Spanish; 2= English; 3= French
4. Database language: leave 2 (English)
5. Path to web browser (optional)

# Edit MCHeng.bat file

(in the root folder where MCH has been installed)

**MCH18.exe -DSNmcheng -DefBMCHtablasycampos.def -DeflMensajesMCH.def -I2 -B2**

**MCH18.exe** : name of MCH executable

**DSNmcheng**: DSN (ODBC connection name), here the ODBC connection is called mcheng

**DefBMCHtablasycampos.def and DeflMensajesMCH.def**: Definition files do not edit

**I2**: User interface language (1= Spanish; 2= English; 3= French)

**B2**: Database language: leave 2 (English)

# Activate new modules (2018)

(in the root folder where MCH has been installed)

The administrator must run and close following .exe, the first time MCH is installed:

- MchSecurity.exe
- MchDefInterface.exe
- MchDefGraf.exe

- Optional -  
Installation of the Apache Server (only  
needed for MCH web pages)

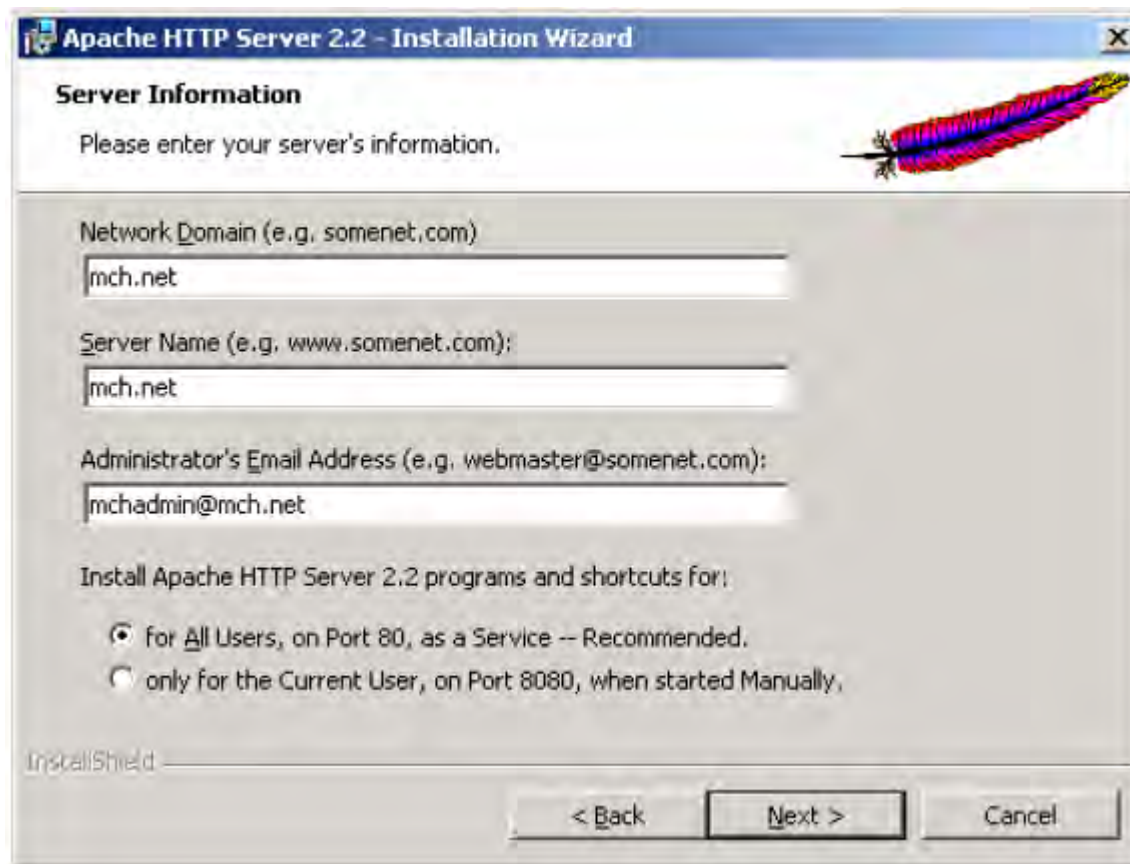
Select: httpd-2.2.11-win32-x86-no\_ssl.msi\*



\* Select the latest version, if it does not work select previous version



- For local use enter localhost as value
- On a network configuration enter IP address



**Apache HTTP Server 2.2 - Installation Wizard**

**Server Information**

Please enter your server's information.

Network Domain (e.g. somenet.com)  
mch.net

Server Name (e.g. www.somenet.com):  
mch.net

Administrator's Email Address (e.g. webmaster@somenet.com):  
mchadmin@mch.net

Install Apache HTTP Server 2.2 programs and shortcuts for:

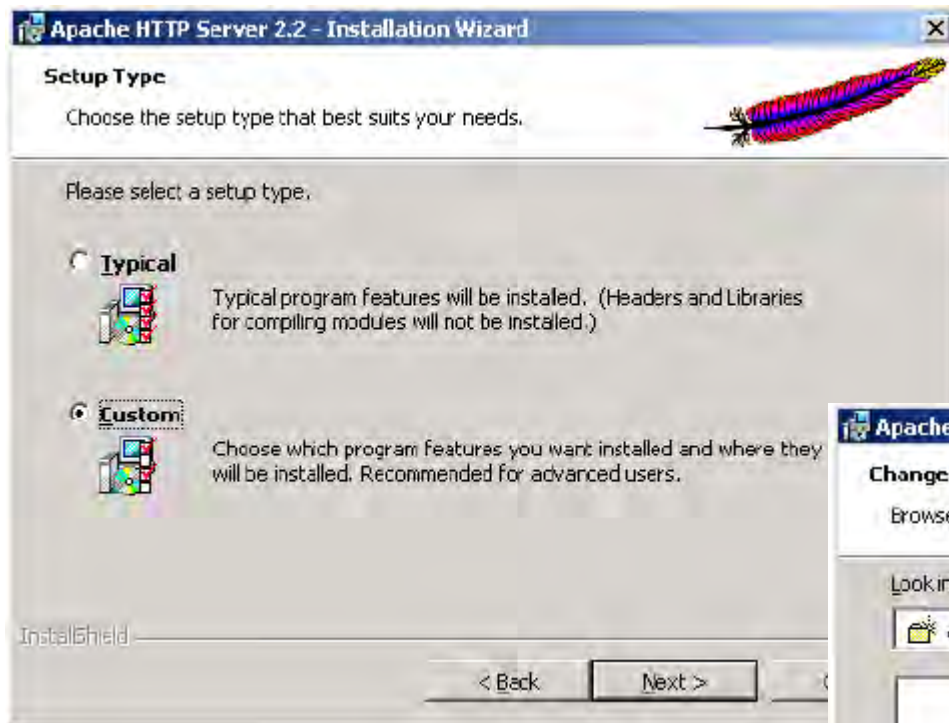
☒ For All Users, on Port 80, as a Service -- Recommended.

☐ only for the Current User, on Port 8080, when started Manually.

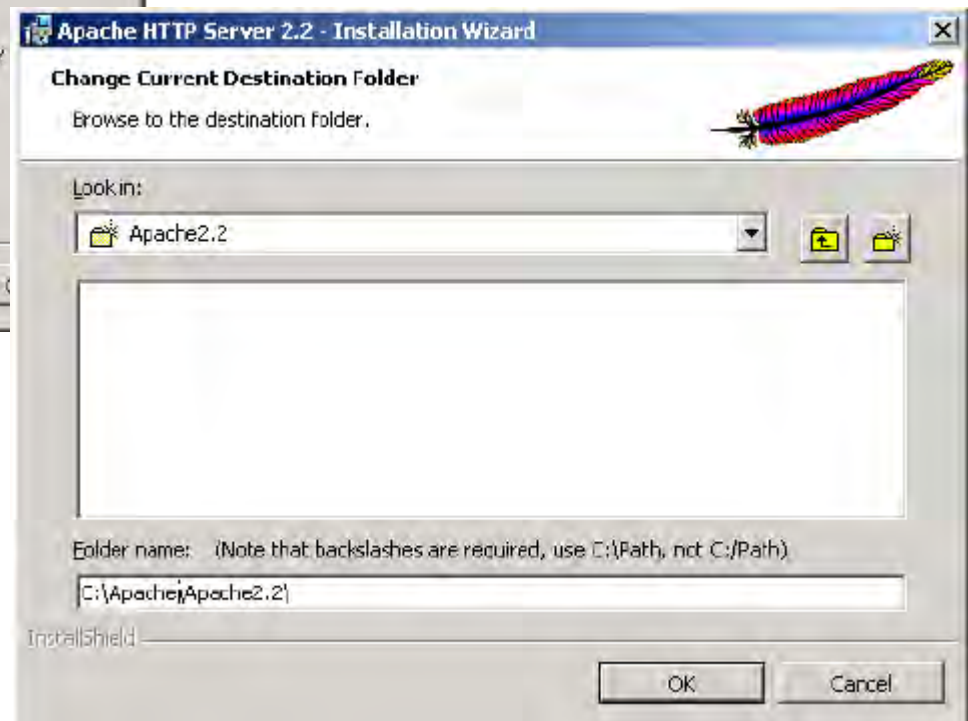
InstallShield

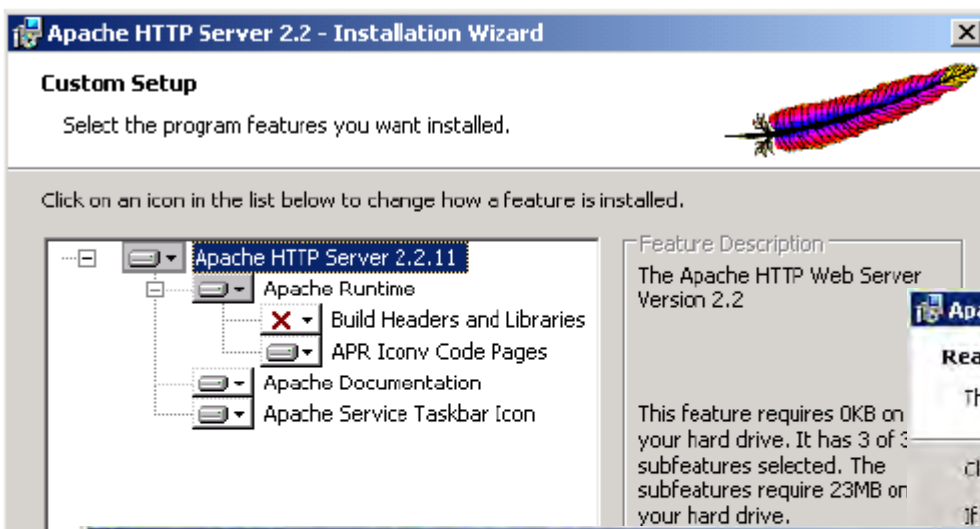
< Back Next > Cancel

- Select Custom and click Next

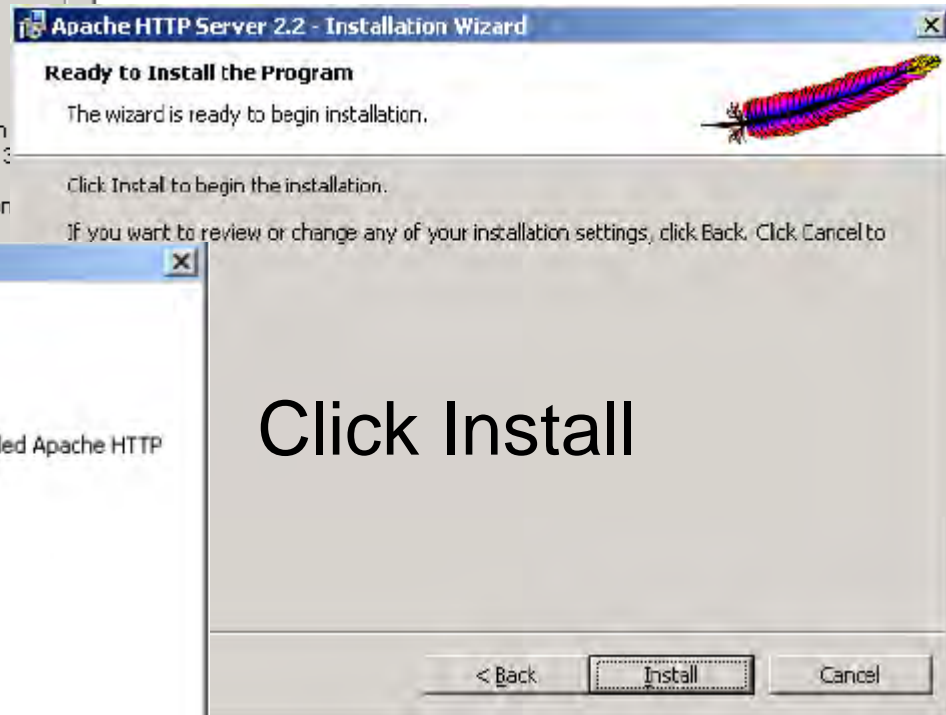


- Save it in the root under C:\Apache\Apache2.2 or directly under C:\Apache

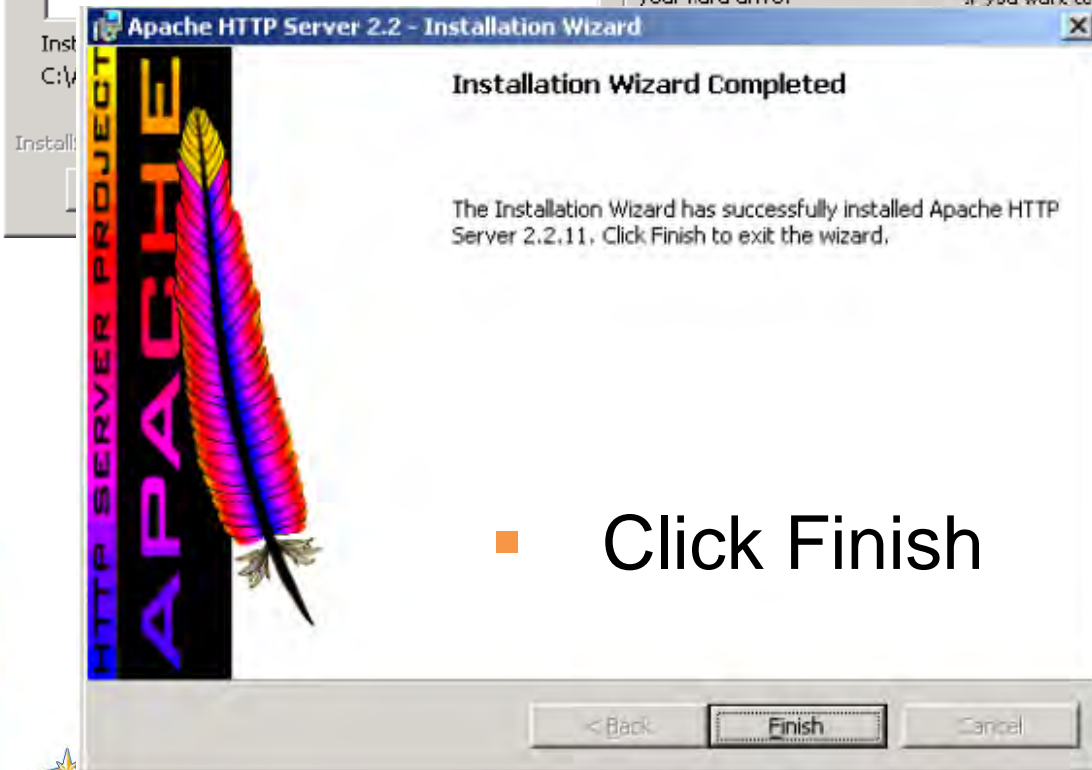




■ Click Next



Click Install



■ Click Finish



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# Configuration of Apache Server

- Copy the files **cgi-binmch**, **htdocs**, **graficos** from the folder pagweb into Apache → Apache 2.2
- Check that the files “\*.dbn” within Apache\cgi-binmch folder are pointing to the correct ODBC Connection

# Edit Apache configuration file

- Under : C:\Apache\Apache2.2\conf\httpd.conf
- Compare: C:\Apache\Apache2.2\conf\original\httpd.conf

And

- C:\Apache\Apache2.2\conf\httpd.conf
- Copy **c:\mch\midas.dll** in the cgi-binmch folder
- The maps that have to be displayed on the website should be copied in the cgi-binmch folder under : C:\Apache\Apache2.2\cgi-binmch



- Don't forget to reactivate your antivirus and firewall



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# Check list for the installation and configuration of Apache web server and website interface of MCH



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- ✓ Check that RunTimePlus /dBasePlusRuntimeEngine1703\_EN.exe is properly installed (use dBasePlusRuntimeEngine1703\_ES.exe if the operating system is in Spanish)
- ✓ Install Apache (httpd-2.2.11-win32-x86-no\_ssl.msi)(or the corresponding version of your system)
- ✓ Copy cgi-binmch, htdocsmch, graficosint folders from the pageweb folder in the installation disc to the root of Apache (C:\\Apache)
- ✓ Verify that midas.dll is in the “Apache\\cg-binmch” folder if not copy it from c:\\mch and past it in “Apache\\cg-binmch”

- ✓ Configure the **httpd.conf** under C:\Apache\Apache2.2\conf\httpd.conf
  - DocumentRoot "C:/Apache/htdocsmch" instead of htdocs
  - <Directory "C:/Apache/htdocsmch"> instead of htdocs
  - Alias /icons/ "C:/Apache/icons/"
  - Alias /mchg/ "C:/Apache/cgi-binmch/"
  - Alias /graficosint/ "C:/Apache/graficosint/"
  - ScriptAlias /cgi-bin/ "C:/Apache/cgi-bin/"
  - ScriptAlias /cgibinmch/ "C:/Apache/cgi-binmch/"
  - <Directory "C:/Apache/graficosint/">
    - AllowOverride None
    - Options None
    - Order allow,deny
    - Allow from all</Directory>
  - <Directory "C:/Apache/cgi-binmch/">
    - AllowOverride None
    - Options None
    - Order allow,deny
    - Allow from all</Directory>



- ✓ Configure mch.dbn in cgi-binmch folder
- ✓ Configure mchWeb.dbn in cgi-binmch folder
- ✓ Check that the port 80 is not blocked by firewall (Windows or antivirus firewall)



# Thank you Merci

<https://www.wmo.int/chy/communities/>



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